

18th, 1874), "Hydatid disease is endemic in this colony; and, though not so constantly met with as in Iceland, we may probably claim the doubtful honour of holding the second place in the list of countries so affected". In the *Argus* for June 20th of the same year, another writer (whilst recommending turpentine as a cure) refers to the frequent notices of cases of hydatids published in the various local newspapers. A retired member of the profession—Dr. John P. Rowe—writing on sheep-rot in the *Melbourne Leader* (September 7th, 1872), incidentally remarks on the "notable increase of hydatid disease in the human subject". Again, still more satisfactory evidence is afforded by a writer in the *Leader* of the 31st January, 1874. Whilst reviewing one of my manuals, he not only takes occasion to speak of the prevalence of hydatids in a general way, but also supplies just that very kind of accurate statistical evidence of which we much stand in need. He gives the following table, showing the number of deaths (not cases merely) from hydatids in Victoria for eleven years, ending in 1872. It is too instructive to be passed over.

Years.	Males.	Females.	Total.
1862 .. .. .	3	2	5
1863 .. .. .	3	2	5
1864 .. .. .	6	3	9
1865 .. .. .	9	6	15
1866 .. .. .	18	7	25
1867 .. .. .	13	12	25
1868 .. .. .	21	12	33
1869 .. .. .	12	10	22
1870 .. .. .	10	7	17
1871 .. .. .	6	9	15
1872 .. .. .	24	5	29
Total deaths in eleven years ..	125	75	200

To employ the writer's own words, "this mortality gives only a faint notion of the extreme prevalence of hydatids in Victoria, since numbers of cases are cured by tapping, and otherwise by medical treatment, or by spontaneous bursting of the cysts; and also since hydatids are often found *post mortem*", where the patients have died from other diseases. Doubtless, as with ourselves, their presence has often never been suspected during life. "To meet with hydatids as a cause of deranged health is now a matter of daily expectation with every medical practitioner."

Such are the facts from Australia. As regards home evidence, so far as I am aware, little or nothing has been done towards securing an accurate estimate of the mortality in England from echinococcus disease. The reports of the Registrar-General give no sign. That is not his fault, perhaps; but if the public relied on such a source of information, they might be led to conclude that hydatids had no existence, or, at least, if they had, their presence added nothing to our bills of mortality. The explanation is not far to seek. For the most part, hydatids are either classed with diseases of the liver, or of other organs in which they happen to have formed, thereby producing fatal results.

As a student of parasites for more than a quarter of a century, I must, without giving intentional offence, be permitted to protest against the omission of parasites in statistical evidence as a cause of mortality. The Australian table alone is a standing protest. From facts within my own knowledge, I can confidently assert that parasites in general, and hydatids in particular, play a far more important part in the production of disease and death (alike amongst mankind and animals) than either the public or (if I may say it unoffendingly) the profession are aware of.

As regards the Australian evidence, I cannot close my references without also referring to the experiences of Dr. MacGillivray, as recorded year after year in the *Australian Medical Journal*. The able surgeon to the Bendigo Hospital, from 1862 to 1872 inclusive, treated as in-patients no fewer than seventy-four cases of hydatid disease. He operated on fifty-eight of them. Two patients were tapped for temporary relief (as they were dying of other diseases); and of the remaining fifty-six, only eleven died. No fewer than forty-five were discharged *cured*—a fact redounding largely, I should think, to the credit of Australian surgery.

Not without some trouble have I gathered the foregoing particulars from museums, with others recorded in a widely scattered literature. I have also in my possession a number of characteristic specimens, contributed by medical friends, with notes of the cases. I regret that I am unable to pursue the subject further. I have elsewhere shown that it is possible to form an approximatively correct notion as to the prevalence of hydatids in particular organs of the body (*Lancet*, June 9th). Here I have been chiefly desirous of calling

attention to the mass of pathological data which, although well within reach, has not at present been utilised to the extent to which they might have been. In publishing these notes, under editorial approval, I have been animated by no professional motive other than and beyond that of advancing the helminthological department of sanitary science and the healing art.

# SUPPRESSION OF URINE FIVE DAYS: DEATH: POST MORTEM EXAMINATION: SYMMETRICAL BLOCKING OF BOTH URETERS WITH CALCULI.\*

By WILLIAM NEWMAN, M.D.Lond., F.R.C.S.Eng.,  
Surgeon to the Stamford Infirmary.

M., AGED 73, on two prior occasions—the first eight years ago, the last about two years ago—had had attacks of severe pain in the loins, and had passed lithic acid calculi. On the occasion of the first seizure, he seemed to be very ill, and in danger of dying, though the history of his symptoms was by no means clear.

1875. July 24th. He had some uneasiness about the left loin rising to much more severe pain on the next day. This pain was relieved by opiates. No calculus was detected in the urine passed on the 24th; and since the morning of the 25th, no urine whatever had been passed.

July 28th, 8 P.M. I saw him in consultation with Mr. Eddowes. The above note was then made. A catheter was passed easily enough. About twenty drops of fluid flowed out, acid to litmus paper. Pulse 96; respirations normal; temperature normal. The skin was acting profusely. The bowels acted freely, three times in the day after some aperient; but no urine passed with the motions. He was said to have been more drowsy than usual to-day. There was no pain on pressure over the pubic region. The hand sank well back into the pelvis. There was no apparent change from the normal condition.

I ventured to make this note on returning home. "Query. The suppression due to blocking of the left ureter by a calculus? If this be the true explanation, then, to account for the suppression, one must suppose that the right ureter is also blocked by some prior inflammatory attack or similar condition of impacted calculus."

Aperient and diuretic medicines were given.

July 29th. A consultation was held with Mr. Eddowes. There was nothing to add to the prior history. No urine was passed. His condition was practically unaltered. He was not in pain. I remembered to have seen noted the good effect of fresh digitalis leaves applied as a poultice in similar cases. Some were obtained, and applied until distinct slowness of pulse was observed; but no good result followed.

July 30th. A consultation was held with Mr. Eddowes. There was still no urine. A catheter was passed, but nothing followed save four or five drops of dark fluid, acid to litmus paper. Pulse 90. Tongue, brownish coating and somewhat dry. He had been sick not unfrequently through the night. He was decidedly drowsy, and more exhausted. We had urged that his family should be telegraphed for; but this, after our leaving, he declined, saying "I am not so ill as to make that necessary". Yet, in less than ten minutes afterwards, after drinking some brandy and water, he laid back in bed, and died at 11 A.M.

July 31st, 7 P.M. Mr. Eddowes was good enough to make a *post mortem* examination. The right kidney was represented by a mere capsule of the size of a small hen's egg; and in this there was hardly a trace of kidney-structure to be seen. At the point of emergence of the ureter was found a calculus, an aggregated mass of lithic acid coated with phosphates, firmly adherent to the lining membrane. The left kidney was normal in size and healthy in appearance. The pelvis contained about a drachm of urine, and several small calculi were fixed in the substance of the kidney. At the same point as on the other side was a calculus, similar in structure and smaller in size, firmly wedged into the ureter.

I have thought that this history would be worthy the notice of the members present, because it illustrates one of the causes of sudden suppression of urine—the mechanical form of "surgical" suppression, if I may be allowed the phrase.

The influence of alterations in the circulating fluid, *e.g.*, in fevers, etc., is often markedly shown in the diminution of or suppression of urine. But this case must be ranged under a different heading, and claims your notice more as a curiosity than as available for special instruction.

It is interesting, however, to note that for several years uniform good

\* Read at a meeting of the South Midland Branch.

health had been maintained with one kidney only; and further that the diagnosis ventured on during life as almost certainly true from the history and symptoms was abundantly confirmed by the *post mortem* examination.

## TRANSVERSE FRACTURE OF THE UPPER END OF THE TIBIA BY INDIRECT VIOLENCE.\*

By W. H. JALLAND, F.R.C.S., York.

ON Friday, August 20th, my partner, Mr. Husband, was sent for to see a joiner named W. G.; and, in his absence, I went. I found W. G. in bed; he informed me that he met with his accident in the following way. He was sitting upon the roof of a shed in his yard, with his legs hanging over the side, doing some repairs, when he suddenly slipped, coming to the ground upon his feet, a distance of from six to eight feet. He rolled on the ground; and, upon attempting to rise and walk, found he was unable to do so. He was then carried into the house. Upon making an examination, I found the left knee-joint very much swollen from effusion into it; and also detected a transverse fracture of the tibia, just below the tuberosities, the separated portion being split into two pieces, apparently from the lower end having been driven into the upper one. The outer tuberosity was displaced somewhat outwards, and the head of the tibia measured an inch more in circumference than the sound one. The fibula was not broken. Mr. Husband afterwards examined the leg, and quite agreed with me as to the nature of the injury. The limb was placed upon a Macintyre's splint, slightly bent, and an evaporating lotion applied to the knee. It was kept upon this a little over five weeks, when the splint was taken off, and a gum-and-chalk bandage put on.

The peculiarity of the case is that the head of the tibia should be fractured by indirect violence, and with such apparent ease, the distance which he fell being at the most eight feet. As a rule, the bone that is injured from a fall upon the feet is the femur, either the neck or the shaft; and the reason is manifest, there being but one bone in the thigh to receive the shock. In the leg, the case is different; there being two bones, the fibula as well as the tibia must sustain some of the force; and, in this case, the fibula was not injured, but the tibia was broken at its thickest part. The patient informed me that the leg was perfectly right before the accident. The man, the recipient of the injury, is sixty-one years of age, but looks older, has the arcus senilis well marked, and his arteries, also, are in a rigid condition (atheroma?), showing that the tissues are undergoing a process of degeneration. His bones seem peculiarly liable to fracture, as he tells me that he has previously sustained fractures of the right tibia and ulna, and also some ribs. I have referred to several surgical works, but can find no mention of a fracture of the upper end of the tibia being occasioned in this manner, all writers giving direct violence as the cause.

## CASE OF RHEUMATOID ARTHRITIS OF TWO YEARS' DURATION SUCCESSFULLY TREATED AT WOODHALL SPA.

By ROBERT CUFFE, M.R.C.S.Eng., Woodhall Spa.

COLONEL — of the Royal Artillery, India, aged 55, of small stature and very temperate habits, had led a very active Indian life, being fond of sport; he had spent nights in the Himalayas watching the habits of game. His father was slightly gouty. In June 1871, when travelling in a railway carriage he caught cold from draught. Two days afterwards, a lump came on the nape of the neck, with thickening of the surrounding parts. In July, Buxton was tried; and, after three weeks' baths, the heels became painful and the joints of the fingers were swollen, with a good deal of constitutional disturbance. These symptoms gradually yielded. In December 1871, he sailed for India, and seemed to recover a little. In July 1872, he was taken seriously ill with symptoms similar to those at Buxton, with great febrile disturbance. The wrists were swollen; the hips, shoulders, and back were also affected; he could only walk with difficulty, and was obliged to be fed for some months. In December, he returned to England and consulted an eminent London physician. In May 1873, he was sent to Aix-les-Bains, and tried the sulphur springs for five weeks, with some improvement. In June, he went to Evian, Switzerland; and the baths there were tried with but little improvement. In August, Wildbad Spa was

visited with the like result after five weeks' treatment. In October, he returned to England. He tried Evaux-de-Challis waters from November 1873 until February 1874. From these various baths, he derived but little more than temporary relief.

In February 1874, he commenced the Woodhall water treatment at home. Finding, after a few weeks, marked improvement, he was induced to go to Woodhall the following April. The following was his condition on April 29th. He walked lame from thickening around the tendo Achillis of the right leg. There was some amount of thickening of the left wrist, with impaired action, enlargement of metacarpophalangeal and first phalangeal joints, especially those of both middle fingers. He was unable to flex either hand or to mount his horse, from stiffness in the lumbar region and left shoulder. He was unable to raise the left arm fully. He had only three teeth; the loss of the others he attributed to salivation. His heart was feeble; the sounds were otherwise normal. In the urine, there was an excess of uric acid, with lithates. His appetite was good.

After five weeks' treatment with baths, hot douches, etc., he could walk with ease a considerable distance; the thickening of the tendo Achillis had disappeared; he had free action of the wrist; he could flex both hands freely, except the middle right finger; and the thickening of the finger joints had become greatly reduced. Iodism was produced; and he left on June 4th.

On August 13th, he reported: "I am gradually recovering the use of my hands and fingers, and absorption is being continued." At intervals, he repeated the Spa treatment, until its influence on the system was produced.

On October 13th, he returned to the Spa. He had much improved; he now used the gun, and could exercise with his sword, which he had not done since he left India. On October 22nd, he left the Spa, continuing local treatment as before.

On January 12th, 1875, he reported as follows: "I have much pleasure in stating that the use of the baths of the Woodhall Spa, combined with the drinking of the iodine and bromine waters there and at home, have restored to me the use of my limbs and hands, which were crippled by rheumatoid arthritis for nearly two years. I may say that, after trying the baths and waters at Aix-les-Bains and Wildbad, none have had such a decided beneficial effect on the chronic rheumatic enlargements of the tendons as the Woodhall Spa waters." I may add that this patient's desire to return to his regiment to complete the remainder of his time, induced him to seek every means possible to effect that end. He consequently most zealously carried out instructions in every detail, not only the usual bath and local treatment, but the dietetic regimen, to which may be attributed a more rapid recovery than is usual in similar cases. He returned to his regiment in India in January 1875.

The notes of this case were supplied by the patient, as well as the report of his recovery on leaving England.

REMARKS.—From observations in similar cases, both in private as well as those in the hospital, I have noticed that the metacarpophalangeal and first phalangeal joints of the middle fingers were more tardy in recovery than others.

It may be interesting to inquire what has led to this rapid recovery after all the usual means had failed; again, what is the therapeutic action of iodides in the human organism? and why are they more potent in natural mineral waters than when chemically produced?

In the first place, iodine when set free exercises a solvent action on organic matters by its oxidising effects. Dr. Broadbent says that iodine is permitted to exercise its influence on the seat of disease in virtue of the comparatively slight affinity by which it is held in union with the base; this being so feeble that, in the presence of certain forms of living protoplasm in active change, the salt is decomposed, and the iodine set free to exercise its solvent action on the organic matters, whether this be direct or indirect, through the well known oxidising effects of free iodine is not so certain. Professor Binz of Bonn says that iodide of potassium undergoes the following changes when taken internally, in a healthy stomach: a part is changed by the hydrochloric acid into hydriodic acid ( $KI + HCl = KCl + HI$ ); another portion is acted on by the chloride of sodium, so that iodide of sodium is formed; and, if the dose be large enough, a part remains unaltered, all the three combinations quickly pass into the circulation; the hydriodic acid here meets with soda, and forms iodide of sodium, but the alkaline combinations of iodine are again acted on in the tissues by carbonic and other acids, and iodine is set free; this free iodine has the property of combining with certain albuminous bodies; and in this, Dr. Binz believes, lies the explanation of the therapeutic action of the preparation of iodine.

If this theory be the correct one, it explains why the iodine combined with soda—as in the Woodhall water—is less irritating and more

\* Read before the Yorkshire and East York and North Lincoln Branches.